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ABSTRACT

A system for observing and coding verbal interchanges between the teacher and his pupils, at all instructional levels, is described in this study. The system, widely known as the Flanders System of Interaction Analysis, is reviewed in terms of its effect on the classroom behavior of teachers and on student attitudes. The application of the Flanders System in the foreign language classroom and foreign language teaching is explored. (RL)

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INTERACTION ANALYSIS IN FOREIGN LANGUAGE TEACHING

A RATIONALE

by

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PREFACE

Direct observation of teachers while they perform in the classroom has recently gained acceptance in research studies as a means of learning more about the teaching process and its relationship to pupil achievement . A number of observational systems designed to measure and analyze classroom behavior have been developed with the last decade. These instruments, the majority of which are based on interaction analysis, have proved very valuable in research, but also in teacher education, supervision and in-service training.

Interaction analysis, a system for observing and coding the verbal interchanges between the teacher and his pupils, has been used to sensitize teachers to their classroom verbal behavior and the influence which this behavior exerts on their students. The results have been positive, indicating that teachers who are trained in this technique, become more indirect and encouraging and less direct and restricting. The resulting classroom climate has improved pupil attitudes and this in turn has improved their achievement.

It is only in the past three years that the foreign language profession has become involved in using and designing classroom observation systems based on interaction analysis. There is still much skepticism as to what these systems can and cannot do. Much of this stems from the misconception that it is another "method" of teaching foreign language. Interaction analysis is not a teaching technique, nor is it meant to indicate whether learning is taking place. Interaction

analysis is simply a means of identifying certain behaviors, observable in the interaction of teacher and students, which influence the climate in which learning takes place.

April 23, 1971

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CHAPTER I

INTERACTION ANALYSIS

A SYSTEM OF CLASSROOM OBSERVATION

Direct observation of teachers while they perform in the classroom has recently gained acceptance in research studies as a means of learning more about the teaching process and its relationship to pupil achievement. Unlike much of the research on teaching which relies mainly on comparisons of the antecedents and consequents of actual classroom performance--i.e., measures of pre- and post-training changes in students--direct observation permits an analysis of individual teaching acts as they occur in spontaneous classroom interaction.

Various observational instruments designed to measure and analyze the classroom behavior of teachers by systematic observation have been developed within the last decade. Unlike the familiar rating scales and polarization sheets long used in classroom observations, these instruments are less influenced by observer interpretation, thus providing a more accurate picture of what has actually transpired in a given teaching-learning situation. The emphasis is not on value judgements based on what constitutes effective teaching, but on a description and an analysis of teaching behavior.

The majority of these instruments are based on interaction analysis--"a system for observing and coding the verbal interchange between

a teacher and his pupils."[1] These verbal interchanges are identified according to a clearly defined set of categories, coded to preserve sequence and tabulated systematically in order to analyze the patterns of teaching and learning. In general, systems of interaction analysis include (1) a set of categories, (2) a procedure for observation, (3) ground rules for coding and (4) specific instruction for tabulation and analysis of data. Each system, however, provides a unique way of viewing classroom instructional talk, of assessing the classroom "climate" which plays a very important part in the learning process. Summarizing some of these systems, Medley and Mitzel conclude:

> There are differences in the terms applied to the dimension as it has been operationally defined in various studies--dominative-integrative, teacher-centered versus learner-centered, hostile-supportive, direct-indirect influence. Yet there is little question that all are referring to highly similar, even identical, dimensions of behavior reliably measurable, and important in educational theory.[2]

Of all the systems that have been developed, the one that evolved from the work of Flanders[3] and his associates has been most widely used. The Flanders System of Interaction Analysis utilizes ten

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1 Ned A. Flanders, "Interaction Analysis and Inservice Training," (Minneapolis: University of Minnesota, 1966), p. 11. (mimeographed)

2 Donald M. Medley and Harold E. Mitzel, "Measuring Classroom Behavior by Systematic Observation," in Handbook of Research on Teaching, ed. N. L. Gage (Chicago: Rand McNally, 1963), p. 274.

3 Ned A. Flanders, "Teacher Influence, Pupil Attitudes and Achievement," (Minneapolis: University of Minnesota, U. S. Office of Education Coop. Research Project No. 397, 1960). (mimeographed)

mutually exclusive categories to describe the verbal communication which takes place in the classroom. Verbal behavior is categorized into one of three major divisions: (a) teacher talk, (b) student talk and (c) silence or confusion. There are seven categories for teacher behavior, four of which are classified as indirect influence. They are (1) accepting pupil feeling, (2) praising and encouraging, (3) accepting pupil ideas, and (4) asking questions. Direct teacher influence is divided into three categories which are (5) lecturing or giving information or opinion, (6) giving directions and (7) criticizing or justifying authority. Two categories of pupil talk are used in the system: (8) pupil response to the teacher and (9) pupil-initiated talk. The last category (10) is reserved for periods of silence or confusion. The categories of Flanders system are summarized in Figure 1.

The category numbers corresponding to verbal behaviors used during a lesson are recorded every three seconds by a trained observer, either "live" in the classroom or from an audio-tape of the lesson. After a lesson has been categorized, the data are summarized for interpretation. This is done by entering the category numbers in the form of tallies into a ten-row by ten-column matrix resulting in a graphic picture of the lesson. The completed matrix gives the observer a picture not only of the percentage of interaction in each category, but also the general sequence of responses. Although the sequential time element of the entire lesson is not shown, the matrix does preserve the sequence of adjacent numbers, thus illustrating which behaviors immediately preceded or followed others. A sample matrix is illustrated in Figure 2.

FIGURE 1

FLANDERS CATEGORIES FOR INTERACTION ANALYSIS

TEACHER	INDIRECT INFLUENCE	1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a nonthreatening manner. Feelings may be positive or negative. Predicting or recalling feelings is included. 2. PRAISES OR ENCOURAGES: praises or encourages student action or behavior. Jokes that release tension, but not at the expense of another individual; nodding head, or saying "um hm?" or "go on" are included. 3. ACCEPTS OR USES IDEAS OF STUDENTS: clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to category 5. 4. ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.
TALK	DIRECT INFLUENCE	5. LECTURING: giving facts or opinions about content or procedures; expressing his own ideas, asking rhetorical questions. 6. GIVING DIRECTIONS: directions, commands, or orders with which a student is expected to comply. 7. CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extreme self-reference.
STUDENT TALK		8. STUDENT TALK-RESPONSE: a student makes a predictable response to teacher. Teacher initiates the contact or solicits student statement and sets limits to what the student says. 9. STUDENT TALK-INITIATION: talk by students, which they initiate. Unpredictable statements in response to teacher. Shift from 8 to 9 as student introduces own ideas.
		10. SILENCE OR CONFUSION: pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

FIGURE 2

SAMPLE MATRIX

A FOREIGN LANGUAGE CONVERSATION LESSON *

	1	2	3	4	5	6	7	8	9	10	ROW TOTAL
1	4	2	1			2			1		10
2	1	8	3	14	2	5		1	11		45
3	2	8	6	19	7			1	1	1	45
4	1	2	3	36	5	5		19	26	2	99
5		5		12	11	3			2		33
6				1		1			17	1	20
7											0
8		6	5	8		2					21
9	2	14	27	8	7	2			123		183
10				1	1				2		4
COL. TOTAL	10	45	45	99	33	20	0	21	183	4	460

* Gertrude Moskowitz, The Foreign Language Teacher Interacts, p. 71.

Matrix analysis reveals many things about classroom interaction. Generally, the observer begins by studying the different kinds of statements in terms of percentages to determine the proportion of the total interaction in the observed classroom situation found in each category. Then, percentages of teacher talk, student talk, and silence or confusion are calculated. The next area of attention is the number of indirect teacher statements as compared to the number of direct behaviors, and the computation of indirect-direct (I/D) ratios. Although there are nine different I/D ratios each of which focuses on specific areas of the matrix, all are concerned with the extent to which the teacher expands (indirect influence) or limits (direct influence) student participation.

More specifically, matrix analysis answers the following questions:

1. What percentage of the class time does the teacher talk?
2. What percentage of the class time do the pupils talk?
3. Does the teacher use more indirect or direct influence during a lesson?
4. Is the teacher more indirect or direct in the way he motivates and controls the class?
5. What kind of immediate feedback does the teacher give to pupils after they respond?
6. To what extent do pupils participate for extended periods of time?
7. What behaviors does the teacher use to elicit pupil responses in the class?
8. To what extent are pupil responses which are called for by the teacher narrow, predictable ones and to what extent are pupils given the opportunity to bring in their own ideas?

9. What behaviors does the teacher use more extensively in communicating?[4]

There is a growing body of evidence to substantiate the relationship of indirect teaching and student outcome. Between 1954 and 1957 Flanders conducted a series of studies focusing on the constructive attitudes of elementary and secondary students in social studies and mathematics classes and how these attitudes compared with their teacher's patterns of influence.[5] Analyzed data showed direct relationship between the verbal statements of the teacher and corresponding attitudes among students. Pupils of teachers who were observed to be indirect had more positive attitudes than pupils of teachers who were perceived as being direct. These findings indicated that pupils of indirect teachers were more interested in the subject matter and liked the methods used by their teachers better than students of direct teachers.[6] In a study involving junior high school teachers of social studies and mathematics

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4 Gertrude Moskowitz, "The Effects of Training Foreign Language Teachers in Interaction Analysis," Foreign Language Annals, 1, 3, (March, 1968), pp. 221-222.

5 Ned A. Flanders, "Some Relations among Teacher Influence, Pupil Attitudes and Achievement," in Interaction Analysis: Theory, Research and Application, ed. E. J. Amidon and J. B. Hough (Reading, Mass.: Addison-Wesley, 1967), pp. 217-242.

6 Edmund Amidon and N. A. Flanders, The Role of the Teacher in the Classroom, (Minneapolis: Paul S. Amidon and Associates, 1963), p. 56.

Flanders[7] found that greater student achievement was related to indirect teacher influence. Students achieved more on cognitive tests when they were taught by teachers who utilized more indirect rather than direct verbal patterns of behavior during instruction. Teachers of the higher-achieving classes were found to differ from those of the lower-achieving classes in the following manner:

- They accepted and encouraged student ideas five to six times as much.
- They gave directions and criticized students five to six times less.
- They talked ten percent less.
- They encouraged student intiated talk two to three times as much.

Similar results were found by Amidon and Giammateo in a study comparing thirty superior teachers with 150 randomly selected teachers in elementary schools.[8] Further evidence of positive correlation between teacher indirectness and student growth has been recently presented by Campbell and Barnes.[9]

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7 Ned A. Flanders, "Teacher Influence, Pupil Attitudes, and Achievement," (Minneapolis: Univ. of Minnesota, 1960).

8 Edmund Amidon and Michael Giammateo, "The Verbal Behavior of Superior Teachers," The Elementary School Journal, 65, (1965), 283-285.

9 J. R. Campbell and C. W. Barnes, "Interaction Analysis--A Breakthrough?," Phi Delta Kappan, 50, (1969), 218-228

This relationship is not at all surprising in view of the research preceding Flanders's studies. Anderson,[10] one of the pioneers in researching the affective environment of the classroom, in a series of studies (Anderson and Brewer,[11] Anderson, Brewer and Reed[12]) reported that integrative behavior in the teacher induces integrative behavior in the child. Furthermore, the hypothesis that domination incites resistance was supported when it was found that children with the more dominating teacher showed significantly higher frequencies of non-conforming behavior. Withall[13] studied the psychological climate of the classroom and developed the "Social-Emotional Climate Index" which assessed teacher remarks on a continuum ranging from learner-centeredness to teacher-centeredness. Some of the categories into which teacher

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10 H. H. Anderson, "The Measurement of Domination and of Socially Integrative Behavior in Teachers' Contacts with Children," Child Development, 10, (1939), 73-89.

11 H. H. Anderson and Helen M. Brewer, "Studies of Teachers' Classroom Personalities I: Dominative and Socially Integrated Behavior of Kindergarten Teachers," Psychological Monographs, (1945), No. 6.

12 H. H. Anderson, J. E. Brewer, and M. F. Reed, "Studies of Teachers' Classroom Personalities, III: Follow-up Studies of the Effects of Dominative and Integrative Contacts on Children's Behavior," Psychological Monographs, (1946), No. 11.

13 John Withall, "Development of a Technique for the Measurement of Socio-Emotional Climate in Classrooms," Journal of Experimental Education, 17, (1949), 347-361.

statements could be grouped included learner-supportive statements, reproving statements, and teacher self-supporting statements. His technique pointed out that (1) learner dependency upon the teacher is not desirable, (2) the learner should be offered opportunities to make free choices, (3) problem solving is enhanced when the teacher offers verbal expression of understanding. Studies using this instrument led to the conclusion that integrative classroom leadership (less direct and flexible) produced more evidence of learning in children than dominative (more direct and less flexible) type of classroom leadership.

Although individual studies correlating indirect teaching with pupil attitudes and student achievement measures may appear unimpressive when viewed in isolation, the consistency with which it is found to be correlated with student growth enhances its status as a desirable teaching behavior.

The application of Flanders System of Interaction Analysis as a research tool for studying teacher behaviors and teacher influence has already been noted. Much more exciting are its implications for teacher education.

In their review of classroom observation instruments, Medley and Mitzel termed the Flanders system as "the most sophisticated technique for observing classroom climate."[14] In fact, the frequent choice of this system over the many others that have appeared in recent years--

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[14] Medley and Mitzel, op. cit., p. 271.

Simon and Boyer[15] state that in 1968 there were over fifty instruments for analyzing classroom behavior--points to its merit. Hough attributes this popularity to several factors:

1. The basic system contains only ten categories and thus is easily learned.

2. It was designed for direct observation of classroom verbal interaction and thus does not require typescripts of classroom talk or video tape for analysis purposes.

3. It preserves the inter-active, cause-effect quality of classroom verbal interaction.

4. It is easily expandable into more than ten categories for more detailed types of analyses.[16]

The implications of research utilizing Flanders System of Interaction Analysis for teacher education are apparent. As he interacts in the classroom, the teacher, consciously or unconsciously, is continually exerting influence on his students and on the learning situation.

> But how much knowledge does he have about the methods of influence he is using? How much does he know about how children perceive his behavior? And how much control is he able to exert over his behavior in the classroom?[17]

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15 Anita Simon and E. Boyer, "Mirrors for Behavior: An Anthology of Classroom Observation Instruments," Classroom Interaction Newsletter, 3, (1968).

16 John B. Hough, "Ideas for the Development of Programs Relating to Interaction Analysis," (Lansing: Michigan State Board of Education, 1966).

17 Edmund J. Amidon and Ned A. Flanders, The Role of the Teacher in the Classroom: A Manual for Understanding and Improving Teacher Classroom Behavior, (Minneapolis: Association for Productive Teaching, 1967), p. 1.

The use of the Flanders system can stimulate in teachers an attitude of inquiry toward the entire area of teaching behavior. Awareness of the importance of verbal patterns may provide new insights resulting in a desire and an effort to change, adapt, or expand his behavior in the classroom.

Interaction analysis has been taught as an observational tool to classroom teachers in an in-service setting, to prospective teachers in college education courses, to student teachers as part of their student-teaching course and to administrators, supervisors and co-operating teachers. The outcome of the variety of studies in each of these areas has generally been of a positive nature and is represented in a variety of publications.[18] Teachers trained in interaction analysis have demonstrated changes in their perception of teaching as well as in actual teaching behavior.[19] Flanders and his associates noted that after participating in an in-service program on interaction analysis, teachers

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[18] Edmund J. Amidon and John B. Hough, Interaction Analysis: Research, Theory and Application, (Boston: Addison-Wesley, 1967).

Edmund J. Amidon and Elizabeth Hunter, Improving Teaching: Analyzing Verbal Interaction in the Classroom, (New York: Holt, Rinehart and Winston, 1966).

Edmund J. Amidon and Ned A. Flanders, The Role of the Teacher in the Classroom: A Manual ....

[19] Ned A. Flanders et al, Helping Teachers Change their Behavior, (Ann Arbor: University of Michigan, 1963).

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evidenced more encouraging and accepting behavior, were less critical and more indirect than prior to such training. Similar observations have beeh gained from studies involving student teachers.[20] In the area of supervision, the use of interaction analysis data as feeback for student teacher-supervisor conferences has been shown to develop more positive attitudes toward teaching than those of student teachers supervised by conventional means.[21] Zahn found student teachers supervised with interaction analysis much more positive than their own cooperating teachers. Perhaps because they were more aware of their own teaching behavior and the influence which they themselves exerted in the classroom, student teachers trained in interaction analysis tended to have negative feelings about their cooperating teachers who were not trained in the system.[22] Moskowitz noted that when both student teachers and cooperating teachers trained in interaction analysis, their perceptions of the teacher and student teacher relationship were more positive.

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20 Amidon and others, "Interaction Analysis and its Application to Student Teaching," Association for Student Teaching Yearbook, (Dubuque: Wm. Brown Co., 1965).

Norma Furst, "The Effects of Training in Interaction Analysis on the Behavior of Student Teachers in Secondary Schools," (Paper read at American Education Research Association Convention, Chicago, 1965).

21 R. Zahn, "The Effect of Cooperating Teacher Attitudes on the Attitudes of Student Teachers," (Dissertation, Temple University, 1964).

22 Gertrude Moskowitz, "The Attitudes and Teaching Patterns of Cooperating Teachers and Student Teachers Trained in Interaction Analysis," Interaction Analysis: Research, Theory, and Application, Ed. E. J. Amidon and J. B. Hough (Boston: Addison-Wesley, 1967).

By encouraging teacher self-analysis, supervision utilizing interaction analysis as a form of feedback removes much of the tension-laden atmosphere of many traditional supervisor-teacher conferences. Attention is focused on objective study of the teaching behaviors observed in the matrix analysis and how these correlate with instructional objectives and the teaching patterns which the teacher had intended to use within the lesson in order to implement the objectives. In many instances the teacher himself, with the assistance of the supervisor, will actually evaluate his own teaching. Analysis of the subject matter content is not the function of interaction analysis feedback; the primary concern is the way in which the teacher interacts with students in the presentation and discussion of the subject matter content. Supervision becomes a co-operative effort to study and analyze what has actually transpired in the teaching-learning process. For example, was a student given enough time to answer a question before the teacher called on another student? When a student faltered, did the teacher provide a cue, did he encourage the student to continue, or did he criticize, lecture and call on another student? Did his using of pupil ideas stimulate more student participation? By assisting the teacher to interpret data in the interaction analysis matrix, by helping him select effective patterns of behavior to be tried in particular situations, the supervisor becomes a diagnostician and prescriber rather than a critic. Supervision, thus, presents the teacher with a challenge--not a threat--to improve.

In the preceding pages, interaction analysis has been viewed as (1) a technique for observation of teaching, (2) as an instrument

for the analysis of teaching, (3) as a tool for providing feedback about teaching. Two further applications remain to be examined: (4) interaction analysis as a framework for practicing and learning specific teaching skills, and (5) interaction analysis as a basis for conceptualizing and developing various teaching styles.

Training in interaction analysis has helped teachers examine their own classroom behavior in an objective, systematic way and thus has given them new insights into their teaching patterns and verbal behavior. Awareness, however, does not imply change. In order to alter teaching patterns, produce new verbal behaviors or eliminate others, many teachers need more than insight and motivation: They need practice.

Amidon's recent model[23] for teacher training and teaching improvement provides an opportunity for teachers to acquire and become proficient in a variety of specific teaching skills. These skills are defined in terms of Flanders categories of interaction analysis with certain modifications. Each of the original ten categories has been expanded into anywhere from two to four sub-categories for greater depth and detail. Teachers are exposed to several teaching situations and teacher statements which illustrate each category or skill. They must then practice using each category in a specified role-playing situation. The teacher, then, has the opportunity to practice behaviors with which he may not be familiar. The role-playing technique in interaction analysis training is making rapid gains in teacher education as more colleges

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[23] Edmund J. Amidon, Peggy Amidon and Barak Rosenshine, Interaction Analysis-Microteaching: Skill Development in Teaching (SKIT), (Minneapolis: Association for Productive Teaching, 1969).

In addition to its use as a dignostic tool, the interaction analysis matrix can be a useful device for conceptualizing and developing a variety of teaching styles. Once familiar with examples of specific skills and behaviors in terms of interaction analysis categories, the teacher can apply this knowledge to construct a theoretical matrix containing the categories of interaction analysis (patterns of verbal behavior) which he deems appropriate or even ideal for a particular teaching-learning situation. He can test his design by trying to follow the specific strategies while teaching the lesson which is recorded for subsequent coding and analysis. By comparing the matrix of the actual lesson with the preconceived model, an assessment of the extent to which the objectives of the planning matrix were attained and a judgement of the suitability of certain teaching styles for a specific lesson can be made. He may then alter the original schema, as well as his own behavior, until he achieves a working model. This type of design and experimentation with different teaching styles can greatly enhance teacher flexibility.

Although thus far the treatment of interaction analysis in this chapter has tended to be rather positive, some of the negative aspects must be included in order to present an accurate overview of this technique.

Many of the criticisms of interaction analysis have to do with the limitations imposed by the number and nature of the ten categories. Some critics object to the small number of categories; other feel that they are too general; and a few view the categories as too narrow. Other faults that have been pointed out are lack of non-verbal categories,

insufficient student-talk categories, and disregard for differences in subject matter. In many instances, the outcome of these criticisms has been the development of new systems or modifications of the Flanders system.

Ascertaining the need to describe and analyze non-verbal as well as verbal classroom interaction, Galloway and French[24] developed the Indirect-Direct/Encouraging-Restrictive (IDER) system which added the non-verbal dimension to the Flanders categories.[25] Heger's Miniaturized Total Interaction Analysis System (MiniTIA) reduced the Flanders categories to seven, added non-verbal sub-categories to determine if the non-verbal clues supported or contrasted with the corresponding verbal behavior. The Reciprocal Category System (RCS),[26] composed of nine verbal categories applicable to either the student or the teacher can be used to analyze classroom behavior in the sub-matrices of teacher-teacher, teacher-student, student-teacher and student-student.

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24 Charles M. Galloway and Russell L. French, " A Description of Teacher Behavior, Verbal and Non-verbal," (1968) (ERIC Document Reproduction Service: ED 134 028).

25 Herbert K. Heger, "Verbal and Non-verbal Classroom Communication: The Development of an Observational Instrument," (Paper read at American Education Research Association, Minneapolis, March 1970).

26 Richard L. Ober and others, "Simultaneous Use of Four Different Observational Systems to Assess Student Teacher Classroom Behavior," (Paper read at American Education Research Association, Minneapolis, March, 1970).

Amidon[27] took the recent findings of Marie Hughes about public and private criteria, Hilda Taba's levels of thinking and Gallagher and Aschner's types of questions and devised the Modified Flanders Categories System. Good and Brophy[28] observed that interaction analysis categories reflect interaction between the teacher and the class as a whole. In many instances, actual teaching-learning behavior involves the class as a group. However, indirect teaching behaviors such as praise, acceptance of feelings and ideas are usually directed toward individual students. By means of an instrument which categorizes dyadic interaction, Good and Brophy have observed that with some students, usually high achievers, teachers tend to exhibit indirect behaviors almost exclusively. They also noted that direct behaviors were consistently directed toward certain students. The implication is made, then, that matrix analysis of the Flanders categories does not really present a complete and accurate picture of the interaction patterns within the classroom.

Certain assumptions about interaction analysis need to be examined critically. Data establishing the relationship of indirect

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27 Edmond J. Amidon and others, "A Fresh Look at Supervision," (1967) (ERIC Document Reproduction Service: ED 011 878).

28 Thomas L Good and Jere E. Brophy, "Analyzing Classroom Interaction: A More Powerful Alternative," (Austin: Univ. of Texas Research and Development Center for Teacher Education, Report Series No. 26, 1969).

teaching behavior to pupil outcome has been provided by a limited number of studies. In view of this, a number of questions are being raised. Are we really convinced that desirable teacher behavior can be generalized? Is it possible for these behaviors to be affected by other factors, such as ability levels of students?[29] Should subject matter differences and other considerations which may imply different instructional objectives and as a result different disirable teacher behavior be taken into account? Answers to these questions are yet to be found; and they will be found with the aid of observation tools such as interaction analysis.

> Perhaps the major contribution of Interaction Analysis research has been to focus the attention of teacher educators upon the idea that the classroom should be the central focus of study for those interested in the improvement of teaching and that if we are interested in improving teaching then it is the teacher's classroom behavior that we must be concerned with and attempt to change.[30]

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29 Barak Rosenshine and Norma Furst, "Pupil Ability and Teaching Behavior," (Philadelphia: Temple University College of Education, 1969). (mimeographed)

30 Edmund J. Amidon, "Interaction Analysis: Recent Developments," (Paper read at American Educational Research Association, Chicago, February 1966), p. 12.

CHAPTER II

INTERACTION ANALYSIS

IN THE FOREIGN LANGUAGE CLASSROOM

> The very fact that the most important goal of the language teacher is the creation of a new "verbal behavior" on the part of the student justifies the hope that the efficiency of his teaching may also be analyzed and evaluated in terms of observable, behavioral categories.[31]

One of the major assumptions underlying the Flanders System of Interaction Analysis is that "teaching behavior and pupil responses are expressed primarily through the spoken word."[32] Training in interaction analysis increases the teacher's awareness of the various influences he exerts in the classroom through the one activity in which he is most often engaged--talking.

The extensive research conducted by Flanders and his associates to assess the effects of teacher verbal behavior on the attitudes and achievement of students as well as the many subsequent studies which have focused on analyzing the verbal teaching patterns of successful

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31 Robert L. Politzer, "Toward a Practice-Centered Program for the Training and Evaluation of Foreign Language Teachers," The Modern Language Journal, 50, 5, (May 1966), p. 252.

32 Ned A. Flanders, "Interaction Analysis and In-service Training," (Minneapolis: University of Minnesota, 1966), p. 11. (mimeographed)

teachers have been conducted in a variety of settings and teaching situations involving different levels and different disciplines.[33] The verbal behaviors of elementary teachers, secondary teachers and student teachers have been thoroughly examined as they interact with their students in science classes, mathematics classes, English classes and social studies classes. Research has been conducted on the various influences of the verbal behaviors of cooperating teachers and supervisors as they interact with student teachers in supervisory conferences. Some studies have probed even further into teacher-student interaction by analyzing verbal patterns in different teaching-learning activities--i. e., lectures, discussions, discovery sessions--within a given class.

One area where the verbal behavior of teachers and students is of primary importance is the foreign language class. Very few classes in a typical school setting can compete with the average foreign language class in terms of the quantity of verbal output. Yet, foreign languages is one of the few disciplines excluded from the major research studies involving interaction analysis.

Several reasons for the omission of foreign languages from the multiplicity of interaction analysis studies have been advanced. Flanders excluded foreign language classes from his original research because the

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[33] Medley and Mitzel, op. cit.

Simon and Boyer, op. cit.

verbal patterns as evidenced in the data from interaction analysis "were too variable for efficient analysis."[34] Moskowitz[35] attributes the absence of interaction analysis studies in foreign languages to lack of research personnel qualified in the use of interaction analysis and equally familiar with the peculiarities of the foreign language class. Foreign language specialists, she adds, "are primarily steeped in developing new methods for its communication and are not necessarily involved in the behavioral sciences."[36] Other reasons may relate to the insufficiency of the Flanders system to provide for the differential instructional objectives in a foreign language class and the differential behaviors which they imply. Thus, Wragg[37] mentions the need to distinguish between interaction in the native language and interaction in the target language. Jarvis[38] suggests going beyond native-target language discrimination. He advocates that

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34 Ned A. Flanders, "Analyzing Teacher Behavior," Educational Leadership, 19, 3, (December 1961), p. 173.

35 Gertrude Moskowitz, "The Effects of Training FL Teachers..," Foreign Language Annals, (March 1968).

36 Ibid., p. 219.

37 E. C. Wragg, "Interaction Analysis in the Foreign Language Classroom," The Modern Language Journal, 54, 2, (February 1970), 116-120.

38 Gilbert A. Jarvis, " A Behavioral Observation System for Classroom Foreign Language Skill Acquisition Activities," The Modern Language Journal, 52, 6, (October 1968), 335-341.

within the target language segment, further distinction must be made between "real" language and "drill" language categories. In the "real" categories, the target language is used to communicate, while in the "drill" categories language is used to practice.

Finally, the time factor must not be overlooked. Interaction analysis studies were initiated during a period of tremendous activity in the foreign language profession. Foreign language teaching was undergoing a major revision which created new goals, new methods, new materials, new equipment, new programs. A concentrated effort to train foreign language teachers was evidenced in the hundreds of NDEA summer language institutes conducted throughout the country. New foreign language programs were appearing everywhere, not only in secondary schools but at the elementary levels as well; many existing programs were lengthened to provide longer sequences of instruction in a given language; many colleges instituted foreign language entrance and degree requirements. Enrollments soared to an all time high.

At the time when subsequent studies in interaction analysis were being conducted in other disciplines, foreign language specialists were devoting all their energies to the solution of problems engendered by such rapid growth--demands for new materials, demands for more teachers, demands for better articulation within the extended programs. Educational researchers in interaction analysis did not bypass the foreign language classroom. As Moskowitz, Jarvis and Wragg have indicated above, the characteristics of the foreign language class demand an observer qualified in foreign languages as well as in interaction analysis. The logical

source for such an observer, the foreign language profession, was at the time committed to other priorities and just emerging as a profession.

It is only in recent years that interaction analysis has come to the attention of the foreign language profession as a promising technique for classroom observation and evaluation. The work of Gertrude Moskowitz at Temple University has done much to promote its "discovery" among foreign language educators. After several years of research studies focusing on the effects which training in interaction analysis produced in the teaching behavior and general attitudes of student teachers of various disciplines,[39] Professor Moskowitz, a foreign language specialist herself, undertook a similar project involving foreign language student teachers.

In the first study,[40] conducted in 1966, fourteen foreign language student teachers were instructed in the Flanders System of Interaction Analysis in a professional education course taken concurrently with student teaching. The fifteen-week course comprised two hours of general instruction in the Flanders system and two hours in a seminar which related the concepts of interaction analysis to foreign language teaching. This added a behavioral science dimension to their customary "methods" course. The study sought answers to two basic questions:

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39 Gertrude Moskowitz, "The Attitudes and Teaching Patterns of Cooperating Teachers and Student Teachers Trained in Interaction Analysis," in Interaction Analysis: Research, Theory, and Application, ed. E. J. Amidon and J. B. Hough, (Boston: Addison-Wesley, 1967).

40 Moskowitz, "The Effects of Training FL Teachers...."

1. Does training in interaction analysis make a difference in:

   a. The attitudes of the foreign language student teachers toward teaching?

   b. The teaching patterns of the foreign language student teachers?

   c. The attitudes toward foreign language of the pupils in the student teachers' classes?

   d. The attitudes of the foreign language student teachers toward their cooperating teachers?

   e. The attitudes of the cooperating teachers toward the foreign language student teachers?

2. Are the results obtained from training foreign language student teachers in the Flanders system similar to those obtained from training teachers of the other academic disciplines?[41]

Several tests were administered before and after training in interaction analysis. These instruments covered the following areas:

- Pupil attitudes toward the foreign language, the foreign language teacher, and the foreign language class
- Teacher reactions to classroom situations along direct-indirect lines, including possible attitude change after training
- Attitudes and degree of satisfaction of student and co-operating teachers toward each other.

Audio tapes were made of four classes taught by the student teachers. Two of these, a grammar lesson and a conversation lesson, were taped at

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41 Ibid., p. 222.

the beginning of the semester. The other two, also covering grammar and conversation, were recorded after their training in interaction analysis. The tapes were tallied and the data entered in four group matrices: a pre-grammar and a pre-conversation matrix and a post-grammar and a post-conversation matrix. The following findings were reported:

- More positive attitudes toward teaching by student teachers
- More positive attitudes by pupils toward several items which appear to be related to classroom behaviors of student teachers
- More indirect teaching patterns used by student teachers
- More expression of pupils' own ideas in foreign language classes
- Less positive attitudes of the student teachers toward the cooperating teachers.

It was also noted that although the grammar classes seemed more restrictive than the conversation classes as to the range of behaviors produced, similar behavior changes were noted in both--i. e., student teachers in both types of lessons changed their interaction patterns and did, in fact, become more indirect. Moskowitz also noted that the changes in the behavior of the student teachers in both types of lessons appeared to support the goals of the lessons. She observed that more of these objectives were attained after the student teachers had learned interaction analysis. Finally, the study revealed that the results obtained from training foreign language student teachers in the Flanders system were similar to those obtained from training teachers in other academic disciplines: the

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teachers became more indirect, accepted pupil ideas more and criticized less.

The findings of this study were further supported by a related project conducted during the 1966-67 academic year[42] comparing the attitudes and classroom behaviors of foreign language student teachers trained in interaction analysis with those of foreign language student teachers not so trained. Comparisons were made before and after their student teaching experience. The pattern toward more indirect behavior in the post measures was generally not evidenced in the student teachers without the training in Flanders system.

A third project[43] undertaken at Temple University in the summer of 1967 took the form of a graduate three-week course for in-service foreign language teachers. The daily sessions, from three to four hours in length, consisted of two parts: (1) general instruction on observational systems and their applications to foreign language classrooms and (2) foreign language methodology with emphasis on multi-sensory foreign language curricular programs. Twenty seven foreign language teachers from elementary and secondary schools and representing five different languages as well as English as a second language were instructed in the use of

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42 Gertrude Moskowitz, "The Attitudes and Teaching Patterns of Foreign Language Student Teachers Trained and Not Trained in Interaction Analysis," (Paper read at American Education Research Association, Chicago, February, 1968)

43 Moskowitz, "The Effects of Training...," FL Annals, pp. 230-235.

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three classroom observation instruments:

1. The Flanders System of Interaction Analysis
2. The Foreign Language Interaction System (FLint)

   An adaptation of the Flanders system by Moskowitz which includes extra categories of significance to foreign language classes
3. The Indirect, Direct, Encouraging, Inhibiting System (IDEI)

   An instrument which codes and analyzes non-verbal communication.[44]

The purpose of this instruction was to increase the sensitivity of the participants to their own teaching behaviors as well as their effects on students. A variety of techniques were used in acquainting the teachers with the selected observational instruments. These included role-playing, skill sessions, sensitivity training, and learning an unfamiliar language. "Practice in developing new behaviors and analyzing their effects was a key element in the training."[45]

Once familiar with the various observation techniques, the teachers were asked to code and analyze using Flanders system a tape of

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[44] Charles Galloway, "Nonverbal Communication," (Paper read at the American Association of College Teachers of Education, University of Maryland, March, 1967).

See also Galloway and French, " A Description ...." (IDER)

[45] Moskowitz, "The Effects of Training FL Teachers..." FL Annals, p. 231.

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themselves teaching a lesson prior to enrolling in the course. This was very revealing to many teachers who discovered that they were not achieving what they had intended. On the basis of this analysis each teacher was to select the patterns of behavior he wished to change. This practice in self-analysis of previous teaching was followed by planning and teaching a ten-minute micro-teaching lesson according to an "ideal" matrix also designed by each teacher. The video-taped lesson was coded by staff members using both Flanders system and Flint. The tallies were entered into two matrices which were consequently compared to the original planning matrix as well as to the matrix of the initial class previously analyzed. In this analysis teachers objectively and systematically studied what had actually taken place and the factors that had influenced it. Again, the emphasis was placed on self-analysis.

The findings of this study were obtained by means of a questionnaire sent to the teachers once they were back in their classrooms. The questionnaire sought answers to what extent if any the training in observation systems had influenced their classroom behavior. Replies indicated that it had greatly influenced their perceptiveness and interaction in the classroom. The teachers felt that their teaching behaviors were less direct, more flexible, more accepting, encouraging and less restrictive. Moreover, they felt that these changes were more in keeping with the goals of language learning.

Although its impact on the foreign language profession has not been particularly strong, interaction analysis is no longer such an obscure term. An increasing number of references to its use can be found

in the professional literature.[46] These references point to the application of interaction analysis

- as a means of increasing awareness of the teacher's <u>own</u> classroom behavior thus showing up the inconsistencies between goal and method common in the foreign language class
- as a way to sensitize the teacher to the kinds of behaviors he uses and the effects of these behaviors on students thus making aware of his ability to influence student attitudes

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46 Richard J. McArdle, "Teacher Education, Qualifications and Supervision," 259-280; William N. Hatfield, " Foreign Language Program Evaluation," 375-388; Bela H. Banathy, "Current Trends in College Curriculum," p. 136, in <u>Britannica Review of Foreign Language Education, Vol I</u>, ed. Emma M. Birkmaier (Chicago: Encyclopaedia Britannica, 1968).

Robert L. Politzer and Louis Weiss, <u>Characteristics and Behaviors of the Successful Foreign Language Teacher</u>, Technical Report No. 5, (Palo Alto: Stanford University Center for Research and Development in Teaching, 1969), p. 72

Frank M. Grittner, <u>Teaching Foreign Languages</u>, (New York: Harper and Row, 1969), pp. 327-340.

Alfred N. Smith, "The Importance of Attitude in Foreign Language Learning," <u>The Modern Language Journal</u>, 55, 2, (February 1971), p. 87.

Howard B. Altman and Louis Weiss, "Recent Developments in the Training and Certification of the Foreign Language Teacher," <u>Britannica Review of Foreign Language Education</u>, Vol. II, ed. Dale L. Lange (Chicago: Encyclopaedia Britannica, 1970), pp. 262-263.

- as an aid in supervision which offers something tangible
- as a research aid for observing and rating teacher behavior according to categories which relate to the characteristics of successful teachers as determined by previous studies.

A number of modifications of Flanders system as well as the development of entirely new instruments designed for the foreign language class have appeared within the last three years. Moskowitz, whose work with interaction analysis has concentrated on the Flanders system and the application of the original categories to specific behaviors in the foreign language classroom,[47] has in addition developed a special instrument for observing interaction in foreign language classes.

The Foreign Language Interaction System,[48] or the FLint System, is based on the Flanders categories. By separating the silence and confusion (category 10) into two separate categories and by adding another category for laughter, the total number of categories is increased to twelve. Moskowitz adds as sub-categories certain behaviors which relate to teacher talk in foreign language classes--jokes, repeats student's ideas verbatim, corrects without criticism, directs a pattern drill, criticizes student behavior and criticizes student responses. Confusion

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47 Gertrude Moskowitz, The Foreign Language Teacher Interacts, (Minneapolis: Association for Productive Teaching, 1968).

48 Moskowitz, "The Effects of Training...," FL Annals, p. 230.

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is divided into two types--enthusiastic or eager to participate and out of order. The use of English is treated as a special category and is represented in the coding as the letter "e" after the category number.

From these modifications it is possible to determine not only all the indirect-direct ratios (I/D) calculated with the Flanders system, but also ratios involving the use of English. Thus, the following questions could be answered:

1. Is the teacher more direct or indirect when he uses the foreign language?
2. Is the teacher more or indirect when using English?
3. What is the ratio of foreign language to English for the entire class, the teacher, the students?

The answers to these questions reveal a great deal about a foreign language class, not only in terms of the amount of English that was used, but in the type of communication for which it was used. The categories enthusiastic confusion and laughter--often necessary elements in a foreign language class--provide further measures for assessing the tone or climate of the foreign language class.

An ingeniously simple adaptation of the Flanders system recently developed by E. C. Wragg[49] at the University of Exeter, England provides a graphic representation of the interaction patterns in the native and target language. Briefly, the system consists of twenty categories: categories 1-10 represent the original Flanders categories and 11-20

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[49] E. C. Wragg, "Interaction Analysis in the FL Classroom," The Modern Language Journal, 54, 2, (February, 1970), pp 116-120.

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represent the same behaviors when they take place in the foreign language. For example, if the teacher asks a question in English, the observer records category 4; if the question is asked in the target language, category 14 is recorded. The categories are summarized in Figure 3.

FIGURE 3

Speaker		English	FL	Category Description
TEACHER	INDIRECT	1	11	Accepts feeling
		2	12	Praises or encourages
		3	13	Accepts or uses ideas of students
		4	14	Asks questions
	DIRECT	5	15	Lectures
		6	16	Gives directions
		7	17	Criticizes or justifies authority
STUDENT		8	18	Student talk--response
		9	19	Student talk--initiated
BOTH		10	20*	Silence or confusion (* following talk in FL)

Once a lesson has been coded, the tallies are entered into a 20 x 20 matrix which preserves the sequence of immediately succeding events. By looking at different quadrants of the matrix (Figure 4), it is possible to determine such things as the types of activities, behavior patterns which involved English followed by English, English followed by the foreign language, the foreign language followed by English and the foreign language followed by the foreign language.

FIGURE 4

	1 -- to -- 10	11 -- to -- 20
1 to 10	English to English	English to For. Lang.
11 to 20	For Lang. to English	For. Lang. to For. Lang.

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In the limited experiment to test the instrument as an observational tool, several interesting things were remarked. For example, the commonly observed patterns 16-18-12 (teacher direction, student answer, teacher praise) and 14-18-12 (teacher question, student answer, teacher praise) indicated that teacher praise during drill activities was in general kept within the foreign language. But when teachers wished to express criticism, invariably they reverted back to the English category 7. Also, among the 1400 tallies collected in beginning foreign language classes, there were 10 tallies in category 19 (student-initiated talk) compared to 685 in category 18 (student response), illustrating that the majority of student talk in the foreign language was restricted to answering teachers' questions. Student-initiated talk in English, however, was much more common with 129 tallies in category 9.

In Wragg's system, I/D ratios can be calculated for each of the four sub-matrices thus yielding pertinent information about indirect-direct behaviors in the different languages. Ratios for individual categories can likewise be calculated to show differences according to language. Wragg adds that if the extra information about the foreign language is not needed, the data can be converted back to the original Flanders system merely by re-coding the tallies in categories 11-20 as categories 1-10.

A third interaction analysis instrument designed for use in foreign language classes is Nearhoof's ten-category instrument.[50]

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[50] Orrin Nearhoof, "Teacher-Pupil Interaction in the Foreign Language Classroom: A Technique for Self Evaluation" cited in Frank Grittner, Teaching Foreign Languages, pp. 328-340.

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Unlike the systems by Moskowitz and Wragg which distinguish between the indirect-direct nature of teacher influence, Nearhoof's technique describes the major verbal activities which are common in the foreign language classroom. It is not concerned with teacher influence on the classroom climate. Nearhoof based his categories on actual classroom activities which he had observed in dozens of different foreign language teachers. The major divisions are teacher-talk, student-talk, and non-interaction activities. Teacher-talk and student-talk are further subdivided into use of the foreign language and use of English. The categories are summarized in Figure 5.

The procedure for using this instrument follows the standard technique outlined in previous systems. Categories are recorded at three-second intervals and the resulting columns of numbers are, at the end of the observation period, entered in pairs into a 10 x 10 matrix. Analysis of the matrix provides a description of classroom interaction in terms of the various percentages. In addition to the proportion which each individual category represents of the total interaction observed in the classroom, matrix analysis reveals the following:

1. Total teacher activity within observation period
2. Teacher use of the foreign language or English within teacher activity
3. Teacher use of the foreign language or English within observation period
4. Total pupil activity within observation period
5. Pupil use of the foreign language or English within pupil activity

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FIGURE 5

TEACHER	FOREIGN LANGUAGE	1. Communication: gives directions to elicit pupil response, discusses culture ideas, explains, answers questions. 2. Reinforcement: corrects errors by providing or eliciting correct response, reinforces students correct answers, shapes responses, gives hints, models for drills, elicits rote response.
	ENG	3. Clarify Meaning: provides cue. 4. Functional classroom language: uses English for communication and reinforcement.
STUDENT	FOREIGN LANGUAGE	5. Rote Response: automatic responses as in mim./mem. drills, pattern practice, chain drills, repetition drills, etc; reads aloud from text or board. 6. Recombine Prelearned material: answers questions, recombines structures (oral or written) to form acceptable reply. 7. Asks Questions: self originated 8. Spontaneously: discusses topics, reacts freely.
	ENG	9. Classroom Communication: students use English to communicate
		10. Non-interaction Activities: silence, confusion or language activities such as O-S singing, O-R reading, O-W writing, O-L laboratory.

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6. Pupil use of the foreign language or English in total observation period
7. Drill and practice activity (Category 5)
8. Interaction recorded in category 6.

It is interesting to note that in calculating the totals for pupil activity, category 5 is omitted. Pupil activity, then, is viewed only as language use in which the student is the originator of the utterance. This behavior may range from limited recombinations of previously learned material (category 6) to formulation of student-initiated questions (category 7) to spontaneous, free expression (category 8).

On the other hand, teacher use of the foreign language is not divided into categories which distinguish among the significant ways in which teachers interact with students. Category 1, for example, groups two functional uses of the target language: (a) as a means of providing information and (b) as a means of giving directions to elicit student response. Category 2 does not differentiate among the following verbal behaviors:

- teacher statements which elicit drill responses
- teacher statements which correct student responses
- teacher statements of praise which reinforce student responses
- teacher repetition of student statements which reinforce student responses.

Furthermore, asking questions, which in some instances illustrates use of the target language for real communication and in other cases as part of drill activities, is not listed under any of the teacher talk

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categories. The teacher question "Alors, Pierre, comment allez-vous aujourd'hui?" which is an example of using the target language for communication[51] is classified as category 2 in the coding example.

Nearhoof's system provides an accurate description of classroom interaction in terms of the major patterns of teacher versus pupil talk, English versus foreign language, student use of the foreign language as rote imitation versus creative use of the target language. It does not, however, describe in sufficient detail nor distinguish among the broad spectrum of behaviors which characterize the teacher's performance in the foreign language class. It is thus impossible to ascertain the effect of specific teacher behaviors on student performance.

Jarvis selected the categories of his classroom observation system in terms of their effects in language skill acquisition. He derived his instrument from "the psychology of second language learning as it is generally understood at present and from experiential knowledge of how these theoretical considerations do actualize in today's classrooms."[52] Thus, the teaching model on which he based his instrument presumed that

> ...language skill acquisition means optimal student skill development in each of the four language skills...the student must proceed through the stages of "encountering" (hearing or seeing) elements of the language, imitating them, manipulating them, and finally using them in innovative real communication language.[53]

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51 Grittner, p. 333.

52 Gilbert A. Jarvis, "A Behavioral Observation System...," The Modern Language Journal, p. 335.

53 Ibid., pp 335-336.

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He attributes a major part of the teacher's success in attaining optimal student skill development to the choice and frequency of certain teaching behaviors.

The distinction between real language and drill language is one of the major features of the Jarvis schedule. Other divisions include teacher talk and student talk, English versus target language. Within the target language activities further distinction is made between those behaviors involving spoken and those concerned with written language. In all there are 24 categories--13 for teacher behaviors, 9 for student activities, and 2 for silence or confusion or use of English other than provided for in the other categories. These 24 categories are summarized in Figure 6.

The procedure outlined for coding and recording a lesson varies slightly from that of previous instruments. Instead of coding each observed behavior and repeating the category number whenever a specific activity extends beyond a three-second interval, the observer using this system is required to record only the behaviors which he observes at five, ten or even fifteen-second intervals. The time interval, then, and not the frequency of behavior change, determines what category to record.

This particular coding procedure reflects the main objective of this instrument--"to record behaviors which differentiate degrees of what is judged as effectiveness."[54] Thus, according to Jarvis, the

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[54] Ibid., p. 340.

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FIGURE 6

	TEACHER	STUDENT
	TARGET LANGUAGE	
R E A L	A. Evoking student response: elicits interaction by statements or questions, personalized B. Evoked by student: responds to pupil statement or question, interacts C. Classroom management : uses FL in mechanics of running classroom, directs D. Reinforcing or Facilitating Performance: praises and encourages student responses, positive influence, differs from cat.J and cat P in its communicative nature E. Information Explanation: gives facts, explains, focus is on meaning of what is said, communication	1. Evoking response: individual elicits interaction with teacher or pupil, includes directed dialog if used to communicate 2. Responding: individual pupil responds, interacts
D R I L L	G. Evoking stimulus: gives stimulus for pattern drill including dialog repetition, elicits student response H. Repetition reinforcement: repeats student utterance, may be slightly correctional but does not evoke additional student repetition J. Prompting: provides student with language forms, associated with encouragement not correction P. Modeling or correcting: models language for students to hear, does not evoke response, provides corrective model	3. Individual response: to drill stimulus 4. Choral response: to drill stimulus
R E A D I N G W R I T I N G	W. Presenting written language: writes on chalk board, uses overhead projector, charts	5. Writing:stimulus may be writing drill, dictation, innovative writing is included 6. Reading silently: drills from board, book, as well as passages 7. Reading aloud:
	ENGLISH	
	K. About target structure or sound system: explains, makes generalizations M. About meaning: gives or asks for English equivalent, includes English in translation drills N. Management: same as C but in English	8. Question about target: student initiates interaction 9. Answer about target: student completes interaction

\+ Silence or English not in above categories but which seems to facilitate learning

\- Silence or English not in above categories but which seems to impede learning

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difference in time interval produces minimal change in the proportion of these significant behaviors. However, it should be noted that the sequential feature preserved in the other systems discussed, and which is a necessary element in determining patterns of interaction, is lost.

Jarvis used this instrument to determine the congruence of the teaching patterns of student assistants to a pre-conceived model. This ideal teaching model incorporated the ideal average frequency of various behaviors deemed effective in attaining course objectives. Objectives, textbooks, contact hours, methodology, type of student, teacher qualifications and time of the semester were taken into consideration. The purpose for this correlational study was to determine whether the observation system which he had designed was a valid instrument for indicating differences in teaching effectiveness. The high reliability among the three observers in their ranking of the teaching assistants confirmed the validity of the instrument.

The strength of Jarvis's instrument lies in its thorough and yet concise appraisal of the most significant behaviors occuring in a foreign language class which the various categories provide. This system can provide an effective means of analyzing the patterns of interaction between teacher and students, in real language communication or drill activities, in English or the target language, in the spoken language or the written language. Furthermore, it can be used to assess classroom climate by studying the influence of certain teaching behaviors on student performance. Its potential as a classroom observation technique and as a means to improve teaching behaviors is yet to be realized.

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Having examined four techniques for classroom observation in foreign language classes, it seems appropriate to view the Flanders System of Interaction Analysis as it is applied in the foreign language classroom. Following is a description of the categories in terms of teacher and student behaviors common to the area of foreign languages:

1. ACCEPTS FEELING: The FL teacher can communicate understanding of the feelings of anxiety, frustration, and fear which beset students as they attempt to learn a foreign language.

2. PRAISES OR ENCOURAGES: The FL teacher praises student performance and encourages and reassures students in their efforts. Students should be told what they do that is praiseworthy. Humor in FL class lessens tension.

3. ACCEPTS OR USES IDEAS OF STUDENTS: The FL teacher at first repeats verbatim students' utterances; later he can paraphrase student replies.

4. ASKS QUESTIONS: The FL teacher asks questions while drilling, quizzing or in conversation to which he expects response. Narrow questions elicit predictable, restricted response. Broad questions require student assimilation of FL knowledge to create answer.

5. LECTURING: The FL teacher gives facts about pronunciation, culture, structure, how to study or do assignments. Gives routine greetings in FL. Assists student by supplying words, explanations. Corrects students errors without criticism.

6. GIVING DIRECTIONS: The FL teacher gives routine classroom directions or directions for students to demonstrate understanding. May be broad or narrow. Pattern drill statements, cue words, repetition drill utterances are included.

7. CRITICIZES OR JUSTIFIES AUTHORITY: The FL teacher criticizes responses or behavior of students. This includes giving correct response after initial criticism because of its negative feedback. Negative inflections in teacher's voice are included.

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8. STUDENT TALK-RESPONSE: The FL student responds predictably, gives restricted, limited replies. Choral response is included.

9. STUDENT TALK-INITIATED: The FL student responds unpredictably to broad questions or directions that require own ideas, reactions, feelings. The student's response comes from a wider range of possible answers, even if they are not original. The FL student initiates talk or elaborates on narrow response.

10. SILENCE OR CONFUSION: Used to record three consecutive seconds of silence or three consecutive seconds of confusion. It is also used to indicate student to student interaction by inserting between two successive student talk categories uttered by two students. (8-10-8, 9-10-9).[55]

There are a number of specific characteristics particular to the foreign language class--such as interaction involving the use of English versus the target language, real versus drill language --which the Flanders system does not include. Yet, as previous studies have indicated,[56] learning to use this system has enabled many teachers to gain new insights into their own teaching behavior and its influence on their students. Study of the various categories of teacher and student behaviors has increased their flexibility by placing at their disposal an endless array of patterns of behavior from which they can select those which will help them achieve their instructional objectives.

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55 Moskowitz, The FL Teacher Interacts, pp. 5-13.

56 Moskowitz, "The Effects of Training FL Teachers...," FL Annals.

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CHAPTER III

INTERACTION ANALYSIS IN FOREIGN LANGUAGE TEACHING

The growing interest in classroom observation systems and the increasing use of techniques such as interaction analysis reflect the present trend in the field of foreign languages to move away from the simplistic, rigid adherence to a method-prescribed, content-bound, teacher-centered approach to language teaching. The formula for effective teaching based on these premises has proved ineffective. Standard techniques of method implementation have not achieved standard results. Uniform presentation of a specified content has not resulted in uniform mastery of that content. Teacher ability to perform prescribed activities has not guaranteed student performance of those activities.

One source of dissatisfaction with the practices in the teaching of foreign languages in recent years is the result of the lock-step nature which has characterized the foreign language curriculum during the past decade. The "assumption of a 'recommended' sequence and a 'recommended' content has been accompanied by a 'recommended' set of teaching methods,"[57] states Lorraine Strasheim. "Our methods convic-

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[57] Lorraine A. Strasheim, "Rationale for the Individualization and Personalization of Foreign Language Instruction," in Britannica Review of Foreign Language Education, Vol. 2, ed. Dale L. Lange (Chicago: Encyclopaedia Britannica, 1970), p. 16.

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tions," she adds, "have not only dictated our 'how's' but also our 'what', the content, more often than not. The rationales we talk about are more appropriately rationales for certain methods than for foreign-language study itself."[58] Foreign language study has in too many instances become a mechanical exercise based on over-automated methods which, although not ignoring it, have certainly not attained the real purpose of foreign language learning: meaningful communication. As Wilga Rivers states, "language communication involves a relationship between individuals and not merely the memorization and repetition of phrases and practicing of structure."[59]

A second important reason for the discontent with foreign language instruction is the almost total disregard for the student. In the zealous quest for the appropriate technique, the best method, the right text, foreign language teachers have overlooked what should have been the most important factor in their search--the student. Much has been written recently about the emergence of the "new" student who is "more aware, more active, and more apt to challenge present practices and values."[60] Since this "new" student did not suddenly spring forth from a dark corner in the language laboratory, perhaps it would be more

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58 Ibid.

59 Wilga M. Rivers, The Psychologist and the Foreign Language Teacher, (Chicago: Univ. of Chicago Press, 1964), p. 163.

60 Joseph Tursi, ed., Foreign Languages and the "New" Student, Reports of the Working Committees of the Northeast Conference on the Teaching of Foreign Languages, (New York: MLA Materials Center, 1970), p. 8.

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appropriate to talk in terms of a "new" teacher who is definitely more aware, certainly more active, and hopefully more apt to challenge present practices and values.

The present trend in foreign language teaching is toward a flexible curriculum characterized by a variety of goals based on individual needs, interests and aptitudes of students. The role of the teacher in this type of program is no longer that of the drill master skilled in leading students through the maze of repetition drills, substitution drills, pattern drills, transformation drills, question-answer drills, recombination drills with quasi-military efficiency. Instead, the foreign language teacher must assume the role of a diagnostician capable of assessing the needs of his students and then carefully selecting the activities which will meet these needs. He must constantly strive to motivate his students by maintaining a classroom climate which stimulates rather than inhibits learning. In order to do this, he must be sensitive to the feelings of students as well as to the effect which his own teaching behavior may have on them.

In an effort to determine what specific behaviors are characteristic of an effective teacher, the focus of attention has in recent years shifted from pre-conceived notions of effective teaching to the foreign language classroom itself. In the classroom, teacher activities cannot be viewed in isolation, but within the context of the teaching-learning situation and in the variety of interaction patterns which take place in this environment.

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> One of the best established findings of educational research is that a major source of variation in pupil learning is the teacher's ability to promote that learning. Exactly what this ability consists of is not certain, but we have strong evidence that along with subject matter there is involved the teacher's ability to organize this content and present it with due regard for the pupil's ability and readiness to acquire it.[61]

The importance of the teacher's ability to determine the appropriate time to introduce or change instructional activities has been sustained in the findings of a recent study at Stanford University. The study sought to identify specific classroom behaviors and characteristics of successful foreign language teachers and to compare these with those of less successful teachers. Among the findings it was noted that "Teachers who vary their classroom procedures more frequently from controlled to free types of drills and vice versa are evidently more successful than teachers who stay with the same type of drill for prolonged periods of time."[62] Thus, the important factor was the teacher's perception of the precise moment when a change in the type of drill activities would enhance learning.

This is precisely the kind of behavior which knowledge of interaction analysis can help identify. Interaction analysis can provide an objective, systematic technique for research studying the behavior

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61 John B. Carroll, "The Contributions of Psychological Theory and Educational Research to the Teaching of Foreign Languages," in Trends in Language Teaching, ed. Albert Valdman (New York: McGraw-Hill, 1966), p. 96.

62 Robert L. Politzer and Louis Weiss, Characteristics and Behaviors of the Successful Foreign Language Teacher, p. 44.

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patterns of successful teachers as well as the resulting effect of these behaviors on student attitudes and achievment. Once these behaviors and characteristics are identified, specific changes in instructional activities can be recommended.

The categories of interaction analysis can provide a framework for foreign language teachers to practice role-playing specific skills as well as learn to produce certain behaviors. By providing a definite structure, behaviors which might seem elusive or abstract in another setting can be defined, identified and incorporated into the foreign language teacher's repertoire of classroom activities thereby increasing his own flexibility.

The emergent model of the "new" foreign language teacher as one who is aware of the needs of his students and who strives to meet these needs calls for a teacher who is sensitive not only to the feelings of his students, but to the way in which his own behavior affects them. This is not an easy demand to fulfill. Many teachers have badly distorted views of their role in the classroom Training in interaction analysis alerts the teacher to his own behavior, to the various patterns of interaction which he exercises. Teachers are usually shocked to discover, for example, that during certain audio-lingual activities requiring considerable student participation, they themselves have done most of the talking. They are equally surprised to discover that all the functional communication in a foreign language class has been conducted in English; or that ninety-nine per cent of a class period has been devoted to one kind of drill activity; or that the target language is never used in "real" communication. Because it allows teachers to

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focus on their <u>own</u> teaching, to explore and analyze it in a non-threatening atmosphere, interaction analysis can be a major factor in changing teacher behavior so that it is more in keeping with his own goals of teaching.

The new directions in foreign language teaching today--from a lock-step, rigidly implemented, teacher-centered curriculum toward a multi-track, flexible, individualized, student-centered curriculum--can be viewed as a trend from direct teaching influence to indirect teaching influence. Instead of lecturing, giving information, giving directions, criticizing and justifying authority, the teacher is expected to do considerable more praising, encouraging, accepting student's feelings and ideas, and providing motivation.

> The teacher who would succeed in teaching a foreign language must be conscious of the invidious, frustrating, and insecure position in which the student finds himself in the early stages and must be able to inspire confidence through his understanding and patience.
> By seeking to understand the forces motivating the student... he will understand that reinforcement of correct responses is not an automatic process, equivalent for all his students. He will seek, then, to reinforce responses and attitudes in accordance with the individual student's perceived goals.[63]

In view of the high dropout rate in foreign language classes, student attitudes have been the subject of many recent studies.[64]

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63 Wilga Rivers, <u>op. cit.</u>, p. 162.

64 Diana Bartley, "The Importance of the Attitude Factor in the Language Dropout: A Preliminary Investigation of Group and Sex Differences," Foreign Language Annals, 3, 3, (October, 1970), 383-393.

Harry Reinert, "Student Attitudes Toward Foreign Language--No Sale'," <u>The Modern Language Journal</u>, 54,2, (February 1970), 107-112

Alfred N. Smith, "The Importance of Attitude in Foreign Language Learning," <u>The Modern Language Journal</u>, 55, 2 (February 1971), 82-88.

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Although each student comes to the foreign language class with an established set of attitudes, positive or negative, the teacher's influence on these attitudes is extremely important. Not only must the teacher be aware of the influence he exerts, but he must also be sensitive to the attitudes of the students themselves. Although a student's feelings toward the study of foreign language may be opposite from his own, and the teacher may feel frustrated, inadequate or even angry, he should not take it out on the student. Instead, he should provide experiences which may help the student develop some appreciation toward language study.

Interaction analysis can increase the teacher's sensitivity to the attitudes of students, as well as his awareness of the effect which his own behaviors and attitudes exert on them. This may be the crucial factor in determining whether a student will continue in a foreign language class or drop out of the program. In a study of attrition in foreign language classes in Eerie County, New York, it was found that the indirect-direct ratios (I/D ratios) of French teachers correlated with the pattens of attrition.[65] In the classes where teachers were more indirect, a greater percentage of students completed the sequence of French classes through Level IV. Conversely, in the classes where teachers exhibited more direct influence, the attrition rate was higher. Some students who were interviewed in this project

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[65] Anthony Papalia, " A Study of Attrition in Foreign Language Enrolments in Four Suburban Public Schools," Foreign Language Annals, 4. 2, (October 1970), 62-67.

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described their "ideal" foreign language teacher. They wanted this teacher "to be patient, kind, understanding, to have an interest in them, to structure the learning according to their proficiency in the language, to speak the foreign language fluently, and to use it in the classroom."[66]

Recent trends in the philosophy of foreign language teaching point to meaningful interaction not as a desirable goal to be attempted in the distant future, but as a necessary activity even during the early stages of instruction which bears considerable influence on student motivation. One of the most frequent criticisms of present practices in many foreign language classes is the stress placed on drill activities, on rote memorization of language patterns without taking into consideration the nature of language. In many foreign language classes, language is an end, not a means; it is content, not a process. Although students need practice in controlled language activities, these activities must not be carried on to the point of boredom. This defeats the main purpose of drill practice which is to provide students with structures and vocabulary which they can use to express their own ideas and feelings. "It has been demonstrated that too much 'overlearning' results in stereotyped behavior and loss of flexibility, so that, at more advanced stages, the student cannot vary these 'overlearned' responses so as to communicate his 'personal meaning'."[67]

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66 Ibid., p. 66.

67 Wilga Rivers, p. 151.

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In order to make the transition to free expression, to "real" language use, the student must be afforded practice in a tension-free environment. Encouragement and approval from the teacher are essential. "Communication in the foreign language then becomes an effective way of reaching a goal: of obtaining the attention of teacher and classmates, of sharing ideas and interests, of obtaining further information, or of teasing one's friends."[68]

The use of a category system such as Flanders interaction analysis, the Jarvis instrument, or any of the foreign language observation systems discussed in the preceding chapter can be used not only to identify and analyze teaching patterns within the foreign language classroom, but to provide a model of desirable behaviors which a teacher can strive to produce. As a means of presenting meaningful, specific, objective feedback in a way which does not threaten the teacher or student teacher, these category systems can help the supervisor to become more effective in his efforts to improve the quality of instruction. By furnishing a framework for conceptualizing and developing various teaching styles, interaction analysis can be a useful tool in teacher preparation programs.

CONCLUSION

Interaction analysis is not a means to indicate whether learning is taking place. Nor is it meant to assess pupil achievement.

It does not obviate knowing the subject matter. Nor will it increase teacher proficiency in content.

It is not a technique to determine whether interaction is taking place. It can only be used when interaction is taking place.

Interaction analysis is but a help toward identifying certain behaviors, observable in the interaction of teacher and students, which influence the climate in which learning takes place.

Interaction analysis can point to a foreign language teacher that his classroom behavior is too limited and, thus, too limiting of students; too rigid and, as such, too stifling of student interest and initiative. It can tell a foreign language teacher that his students are not getting enough verbal practice, or that excessive repetition is inciting boredom. It can show the teacher that he reinforces automatically with little thought of the student's individual effort. It can tell the teacher that he spends too much classtime explaining, lecturing, criticizing and not enough time eliciting responses, encouraging originality and rewarding effort. It alerts the teacher to his own patterns of interaction in the classroom and how the students respond to these behaviors, thus making him more sensitive to the students' needs, difficulties,

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anxieties, and feelings. Interaction analysis can help the foreign language teacher create a classroom climate that is relaxed, friendly, stimulating, and conducive to learning. It can increase his own flexibility by encouraging him to experiment with additional behaviors and teaching patterns.

Six years ago Robert Politzer made the following observation:

> ...the skill of the language teacher does not lie in withholding the printed word, but in knowing when to introduce it. It does not lie in not allowing the student to proceed from visual symbol to audio-lingual activity, but in timing the reversal of the audio-linfual visual sequence for the most opportune moment. It does not lie in exercising absolutely rigid control and insisting on repetition and more and more repetition, but in allowing freedom within a framework of control...[69]

This sensitivity to student needs, this awareness of the influence of teaching behaviors on student achievment, this ability to lessen rigid control, to become more indirect and more encouraging; this is what will be required of the foreign language teacher in the seventies. Interaction analysis can help the foreign language teacher meet this challenge by increasing his awareness of the dynamic potentials of the student-teacher relationship.

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69 Robert L. Politzer," The Macro and Micro Structure of the Foreign Language Curriculum," The Modern Language Journal, 49, 2, (February 1965), p. 102.

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VITA

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